

1           **BACKGROUND OF THE INVENTION**

2                   1. Field of the Invention

3                   The present invention relates to a wrapping device and to methods of  
4                   making and using the same and, more particularly, to a versatile device that can be  
5                   wrapped around a portion of an article, such as the handle of luggage, to cushion  
6                   and otherwise condition the interface between such portion and the part of a user's  
7                   body, such as a hand, that would normally contact such portion and to methods for  
8                   making and using such a device.

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10                  2. Prior Art

11                 Bean, in U.S. Patent 6,279,168, discloses a wrap for conditioning the  
12                 interface between a part of an article and a user's body and a method for making  
13                 and using the wrap. The wrap, which is generally in the form of a pad, provides a  
14                 flexible, resiliently compressible, elastic pad that is flexed into a tubular  
15                 configuration for tightly wrapping around the part of an article being wrapped.  
16                 The inside surface of the end segment at one end of the pad overlaps the outside  
17                 surface of the end segment at the other end of the pad to provide an adjustable  
18                 fastening strip interposed between the overlapping ends that allows the pad to be  
19                 wrapped about parts of various articles and provides stability at the interface being  
20                 conditioned; and attaching members on the opposed surfaces of the pad and the  
21                 fastening strip that releasably engage each other and tightly hold the pad in

1 wrapped condition around the part being wrapped. Details for making the wrap  
2 are presented in Bean '168.

3 The above-referenced wrapping device, while suitable for providing a  
4 secure grip in many applications, has the disadvantage that when positioned  
5 around a portion of an article, it can rotate freely around the wrapped portion of  
6 the article. In addition, the fabric on the outer surface can slip from ones grip. It  
7 is, therefore, desirable to provide a wrap similar to the wrap disclosed in the prior  
8 art, but having at least one non-slip surface.

## 10 SUMMARY

11 It is an object of the present invention to provide an adjustable wrap  
12 operable for wrapping around a portion of an article, thereafter the wrap  
13 presenting a non-slip article-contacting surface.

14 It is a further object of the present invention to provide an adjustable wrap  
15 operable for wrapping around a portion of an article, thereafter the wrap  
16 presenting a non-slip outer gripping surface.

17 It is yet a further object of the invention to provide an adjustable wrapping  
18 device meeting the above objectives and including means for visually identifying  
19 a particular article bearing an adjustable wrapping device among a plurality of  
20 similar articles.

1           The above objectives are met by the provision of an adjustable wrapping  
2           device comprising a flexible sheet of a compressible elastomer laminated to a  
3           sheet of a reinforcing fabric to form a laminated sheet. The sheet of compressible  
4           elastomer has an upper and lower surface wherein at least one of the surfaces is  
5           textured. The layer of reinforcing fabric may be interposed between an upper  
6           surface and an opposing surface of the sheet of compressible elastomer or  
7           laminated directly to the upper or lower surface of the sheet. The peripheral edges  
8           of the reinforcing fabric preferably extend beyond the peripheral edges of the  
9           sheet of compressible elastomer and are folded over the sheet such that the fabric  
10          is visible from at least one edge of the wrapping device. The visible portion of the  
11          reinforcing fabric preferably bears a distinctive color such that it may be visually  
12          recognized from a distance. Alternatively, a colored fabric may be affixed to at  
13          least one peripheral edge of the laminated sheet. The adjustable wrapping device  
14          further includes means for releasably attaching an upper edge portion of the  
15          laminated sheet to a lower opposing edge portion of the laminated sheet to enable  
16          the device to be formed into a cylindrical structure.

17          The features of the invention believed to be novel are set forth with  
18          particularity in the appended claims. However the invention itself, both as to  
19          organization and method of operation, together with further objects and  
20          advantages thereof may be best understood by reference to the following  
21          description taken in conjunction with the accompanying drawings.  
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## **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is a top view of an adjustable wrapping device in accordance with the present invention.

Figure 2 is a bottom view of an adjustable wrapping device in accordance with the present invention.

Figure 3 is an enlarged portion of the textured surface for the laminated sheet wherein the texture and non-slip surface is provided by a plurality of cylindrical pillars projecting therefrom.

Figure 4 is an enlarged portion of the textured surface of the laminated sheet wherein the texture is provided by a plurality of rectangular pyramids projecting therefrom as illustrated in Figures 1 and 2.

Figure 5 is a cross-sectional view of the adjustable wrapping device of Figures 1 and 2 taken along section line 5-5 of Figure 2.

Figure 6 is a perspective view of a preferred embodiment of the adjustable wrapping device of the present invention illustrating the opposing edges of the laminated sheet attached to one another to form a cylindrical pad.

## **DESCRIPTION OF THE PREFERRED EMBODIMENTS**

Turning first to Figures 1 and 2, an adjustable wrapping device 10 is shown in top view (Figure 1) and bottom view (Figure 2) respectively. The device 10 comprises a laminate sheet 11 having an upper surface 12 and an opposing, lower surface 13. The upper surface 12 may comprise a reinforcing fabric or, more

1 preferably, a textured surface on a sheet of compressible elastomer, the textured  
2 surface being represented by hatching 14 as shown. The laminated sheet 11 has a  
3 first fastening strip 15 affixed to the upper surface 12 adjacent to a first edge 16 of  
4 the laminated sheet providing releasable fastening means when brought into  
5 juxtaposition with a second fastening strip 21 (Figure 2) affixed to the bottom  
6 surface 13 of the laminated sheet 11 adjacent a second edge 17 thereof. A fabric  
7 18, preferably bearing a visually distinctive characteristic such as color, is shown  
8 affixed to the peripheral edges of the laminated sheet.

9           The textured non-slip surface(s) on the laminated sheet 11 can be made in  
10 a variety of ways. A pattern may be formed in a surface by hot-rolling the non-  
11 textured sheet against a heated, textured roller to impress the desired pattern  
12 thereon and permitting the elastomer to cool. A variety of patterns are possible  
13 that will provide the sheets of elastomer with a suitable non-slip surface. For  
14 example, Figure 3 is an enlarged portion of the textured surface 12 of the  
15 laminated sheet 11 wherein the non-slip, textured surface is provided by a  
16 plurality of closely spaced cylindrical pillars 31 projecting therefrom. Figure 4 is  
17 an enlarged portion of the textured surface 12 (or 13) of the laminated sheet 11  
18 wherein the texture and non-slip surface is provided by a plurality of rectangular  
19 pyramids 14 projecting therefrom as illustrated in the embodiment shown in  
20 Figures 1 and 2.

21           With continued reference to Figures 3 and 4, an embodiment of the  
22 laminated sheet is shown wherein only one surface is textured. The laminated

1 sheet 11 has an upper sheet of a compressible elastomer 32 having a textured  
2 upper surface and a non-textured bottom sheet of compressible elastomer 33, the  
3 upper and bottom compressible sheets 32 and 33 having a sheet of substantially  
4 non-extensible fabric 30 interposed therebetween and affixed to a flat inner  
5 surface on the textured elastomeric sheet 32 and non-textured sheet 33.

6 Figure 5 is a cross-sectional view of the adjustable wrapping device 10 of  
7 Figures 1 and 2 taken along section line 5-5 of Figure 2. In the embodiment 10,  
8 the laminated sheet 11 comprising the device 10 has both a textured upper surface  
9 12 and a textured lower surface 13. A first fastening strip 15, such as, for  
10 example, a strip bearing a plurality of loops, is affixed to the upper surface 12 of  
11 sheet 32 by adhesive means. A second fastening strip 21, such as, for example, a  
12 strip bearing a plurality of hooks operable for releasably engaging the loops on the  
13 first fastening strip 15 is affixed to the lower surface 13 of the compressible sheet  
14 33 as shown. A strip of a colored fabric 18 is preferably affixed to the peripheral  
15 edge of the laminated sheet 11 to substantially complete the construction of the  
16 device 10. The colored fabric 18 enables the visual identification of the device 10.

17 Figure 6 is a perspective view of a preferred embodiment of the adjustable  
18 wrapping device of the present invention illustrating the opposing edges of the  
19 laminated sheet attached to one another to form a cylindrical pad. The device 10  
20 may be employed to provide a non-slip interface between a wrappable article and  
21 a person's hand or other body part.

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While particular embodiments of the present invention have been illustrated and described, it would be obvious to those skilled in the art that various other changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of this invention.

What I claim is: